ORTEC

ASC-950-DP-G

Automatic gasless alpha/beta counter with sample changer

High-speed automatic gross alpha/beta counter with a dual-phosphor scintillator that needs no counting gas. The changer takes 50 samples (100 optional) and reads barcodes; routines and QC charts are programmed in DUO Express and t ransferred via PIC Link. Radon compensation is available for air f ilters.



Detector type

Dual-phosphor scintillator (ZnS + plastic), Ø5.1 cm ; gasless operation [1]

Weight

50 samples: 49.9 kg; 100 samples: 54.4 kg [1]

Specifications

DETECTOR

Detector type	Dual-phosphor scintillator (ZnS + plastic), Ø5.1 cm; gasless operation	[1]
Window	Aluminised, 80 µg/cm²; easy to replace	[1]
Sample geometry	Planchets Ø5.1 cm (2 in), 1/8, 1/4 or 5/16 in deep (3.2, 6.3 or 7.9 mm)	[1]

PERFORMANCE

Typical detection efficiency	Top / 1/8″ / 1/4″ / 5/16″ bottom – optimised for higher-energy betas: ^{239}Pu 34/30/24/21%, ^{90}Sr/Y 45/40/35/34%, ^{99}Tc 24/21/19/18%; optimised for lower-energy betas: ^{239}Pu 35/30/24/22%, ^{90}Sr/Y 47/41/36/35%, ^{99}Tc 26/24/20/19%	[1]
Background rate	Warranted alpha/beta (cpm): <0.2/<25 with lead and guard; <0.2/<30 with guard, no lead; <0.2/<55 with lead, no guard; <0.2/<65 with neither	[1]

COOLING

Sample capacity	Automatic changer for 50 samples (100 optional) with barcode reader, sample range 1–999	[1]

SOFTWARE & DATA

Software	DUO Express included; routines and QC charts are programmed on a PC a nd transferred via PIC Link cable; Vista FC as an option	[1]

CONNECTIVITY & INTERFACE

Communication	Data export via USB PIC Link and USB flash drive	[1]
User interface	Built-in colour touch screen	[1]

POWER & BATTERY

Power supply	110–240 V AC, 50–60 Hz	[1]

MECHANICAL

Dimensions	50 samples: 91.4 × 59.7 × 59.7 cm; 100 samples: 137.2 × 59.7 × 59.7 cm (H × W × D)	[1]
Weight	50 samples: 49.9 kg; 100 samples: 54.4 kg	[1]

ORDERING & ACCESSORIES

ptions	Lead ring ORT-ASC-950-SHLD (22.7 kg); 100-sample option OR T-ASC-950-OPT-04 (adds about 18 in to height and 10 lb); cart PIC-ACC-02	[1]

GENERAL

Count modes	Alpha only; alpha/beta simultaneously; alpha then beta	[1]

Sources

[1] **ORT-ASC-950-DP-G Automatic Sample Changer**
RTEC (AMETEK) · product-page · More Information; Instrument Specifications; Specifications; Instrument Specifications · checked 2026-10-16
https://web.archive.org/web/20261016000000/https://www.ortec-online.com/products/systems/gross-alpha-beta-me…

Every value is taken from the manufacturer's own document; the number after the value refers to the source list. Always check against the latest datasheet before ordering.

The data comes from the manufacturer's published documents. Manufacturers may change specifications; the current configuration and performance are confirmed in the quotation.